

# Methamphetamine Addiction

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# What is methamphetamine?

- ★ Powerfully addictive stimulant that dramatically affects the central nervous system
- ★ The drug is easily made in clandestine labs with relatively inexpensive over-the-counter ingredients

# Methamphetamine, cont.

- ★ Can be taken a variety of ways
  - Orally
  - Snorting
  - Smoking
  - Injection
- ★ These factors create high potential for widespread abuse.

# Effects of methamphetamine:

- ★ Appeals to users because it increases the body's metabolism and produces alertness, euphoria and increased energy.
- ★ Meth acts very strongly in the pleasure center of the brain
- ★ Powerfully reinforcing

# Physical Effects

- ★ High blood pressure, strokes, seizures
- ★ Irregular heartbeat
- ★ Impaired regulation of body heat
- ★ Internal bleeding, kidney failure
- ★ Scars or open sores from scratching skin during hallucinations
- ★ Weight loss-sometimes attractive to women for that reason
- ★ Increased risk of HIV/other STDs because of use of shared needles and increase in sexual appetite

**Figure 5. Examples of "Crank Bugs."**  
*This individual almost died from his "crank bugs." He gouged at his skin until the "bugs" became infected, and then the infection began to poison his body. The abuser has generations of scars on his body and had used d-methamphetamine as recently as the day before these pictures were taken. Although this abuser shows signs of d-methamphetamine abuse through the appearance of crank bugs, he does not exhibit other effects noted in table 2. This individual is not gaunt; he had no central pallor or body odor. He did not sweat, and his teeth appeared normal.*



Photos of individual are the property of NDIC.

# Mental Effects:

- ★ Vary during cycle of use
- ★ Euphoria, sense of extreme well-being
- ★ Irritability, argumentativeness, restlessness
- ★ Paranoia, impulsiveness, potential for violence
- ★ Hallucinations, delusions, loss of touch with reality
- ★ Need for sleep (up to 3 days continuously)
- ★ Lethargy, depression, suicidality

## Cycle of use:

- ★ Rush – 5 to 30 minutes – euphoria
- ★ High – 4 to 16 hours – energized, alert
- ★ Binge – 3 to 15 days – repeated use to maintain the high, very hyperactive



## Cycle of use, cont:

- ★ Tweaking – most dangerous stage of cycle – individual hasn't slept in up to 15 days, cannot maintain high any longer. Is irritable, impulsive and capable of violence
- ★ Crash – 1 to 3 days – sleep
- ★ “Normal” – 2 to 14 days

## Cycle of use, cont:

- ★ Withdrawal – 30 to 90 days –  
unpleasant, depressed, lethargic,  
craving drug

# Cognitive effects of long term meth use:

- ★ Distractibility, difficulty sustaining attention
- ★ Poor memory, poor abstract reasoning
- ★ Impulsiveness

# Cognitive effects of long term meth use:

- ★ Studies show the brain chemical changes causing these cognitive effects to persist up to 9 months
- ★ However: initial studies show continued impairment may be permanent in some individuals, even with maximal brain recovery

# Similarities to and differences from other addictions



# Similarities:

- ★ Brain-based disorders with both genetic and environmental factors
- ★ Progression of usage from recreational to addiction – not everyone is addicted with first use
- ★ Chronic illnesses with potential for relapse and long term need for recovery management
- ★ Often complicated by the presence of other co-existing mental illnesses, co-morbidity

# Similarities, cont:

- ★ Substance abuse treatment does work!
- ★ Illness management and recovery (think diabetes) vs. acute “cure” (think bacterial infection with antibiotics)
- ★ Addicted individuals often do not have insight and resist treatment. Leveraged coercion can be very effective at moving people into treatment

# What is leveraged coercion?

- ★ Individual is faced with choice to engage in treatment or face undesirable consequences: loss of spouse, job, children, freedom, etc.
- ★ This concept has important implications for the interface between treatment and corrections



# Differences from other Addictions:

- ★ The intensity and duration of pleasurable experience is greater – faster and stronger high
- ★ Onset of dependence with methamphetamine is much more intense and rapid

## Differences, cont.

- ★ Relatively cheap and plentiful
- ★ Synthetic – can be made anywhere in contrast to plant derived drugs (cocaine, marijuana, heroin), which require warm growing conditions, subsequent processing and then long distance distribution

## Differences, cont:

- ★ Cognitive impairment lasts longer
- ★ Studies show 9 months before brain chemicals return to “normal”
- ★ Disturbing data that some degree of cognitive impairment may be permanent, depending on length and intensity of use

# “Telescoping”

- ★ Most significant difference from other types of substance abuse
- ★ Like fast forwarding a movie
- ★ Stages of progressive addiction and loss of function move much more quickly than alcohol and other drugs – sometimes months compared to decades

# “Telescoping” cont.

- ★ See severe consequences in young people in critical stages of their lives
- ★ Loss of function in emotional development, education, relationships, employment, parenting

# Treatment considerations:

- ★ Treatment works
- ★ Illness recovery management, not a “quick” fix
- ★ Consideration of persistent cognitive deficits must be kept in mind
- ★ Treatment often requires “wraparound” resources: structured living, vocational supports, childcare and parenting education.

# Treatment considerations, cont.

- ★ Don't be afraid of demanding accountability but don't punish people for having diseases
- ★ Corrections and treatment entities need to work more collaboratively
- ★ “too permissive” vs. “too punitive” is not helpful
- ★ Leveraged coercion – “carrots and sticks”

# Questions & Answers

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